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Dr. C-A. H. Roten Institut de génétique Rue César-Roux 19 CH 1005 Lausanne, SUISSE

Dear Dr. Roten

I was quite intrigued by your paper in Experientia:

TI - Endogenous synthesis of peptidoglycan in eukaryotic cells - a novel concept involving its essential role in cell division, tumor formation and the biological clock.

and would welcome a fresh reprint if you can spare it.

(I knew Pappenheimer, and followed his work over the years, and again V. Ivanov in Moscow, who has been more recently active with sleep peptides And I send you some work years ago where I looked at DAP-deprivation in bacteria.)

But I look for more critical evidence of endogenous synthesis of PG's in the animal. Axenic animals should answer the question rather readily: do you know of any efforts? Meanhwile, a simple but long shot would be to look for PG synthesis in a readily accessible axenical animal, namely the chick embryo before hatching.

You did quote me accurately as expecting that wide-ranging gene transfer would be found in ever more cases; I look forward to verification of that here. There is however no room in the existing mitochondrial genome for it, which is not to say that it was not in the original progenitors.

How about PG's in yeast, which also have mitochondria?

Joshua Lederberg

Yours sincere

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